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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/937,413	03/20/2002	Steve Smith	9052-91	9507
20792	7590	03/28/2005	EXAMINER	
MYERS BIGEL SIBLEY & SAJOVEC			BAHTA, ABRAHAM	
PO BOX 37428			ART UNIT	
RALEIGH, NC 27627			PAPER NUMBER	

1775

DATE MAILED: 03/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/937,413

Applicant(s)

SMITH ET AL.

Examiner

Abraham Bahta

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 29-49 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 29-49 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 March 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>01/18/02</u> | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or
REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
- (e) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (f) BRIEF SUMMARY OF THE INVENTION.
- (g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (h) DETAILED DESCRIPTION OF THE INVENTION.
- (i) CLAIM OR CLAIMS (commencing on a separate sheet).
- (j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Specification

The specification on pages 14 indicates Table 1 showing suspension geometry and force calculations and on page 16 Table 2 showing various suspension positions; however, portions of the numeric values in Table 1 and Table 2 are illegible. Correction is requested.

Drawings

On page 11, lines 10-12 the specification indicates that figure 2 shows the piston (17); however, figure 2 does not show reference sign (17). Correction is requested.

Claim Objections

The following suggestions are made for claims 29-37, 39, 41 and 44.

In claim 29-37, 39, 41 and 44 change "characterized in that" to --wherein--.

Claim Rejections - 35 USC § 112

Claims 29, 32, 34, 37, 44 and 48 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 29 is confusing. The claim on lines 4-5 recites the wheels are supported by a radially mounted suspension arm and on line 10 the claim recites the pig rotates whilst traveling down a pipe. It is not clear whether the wheels are rotated or the pig. Clarification is requested. In addition it is not clear if the "suspension mounting" recited in claim 29, line 3 and lines 5-6 is the same suspension mounting.

In claim 32, line 2 the term "housing" lacks antecedent basis.

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In claim 34, line 2 the phrase "biasing means" lacks antecedent basis. Further, the phrase " the biasing means internally mounted" is not clear. Internal of what?

In claim 37, line 2 the phrase "biasing means" lacks antecedent basis.

In claim 44, line 2 the phrase "sealing disc" lacks antecedent basis. There is no previous mention of "a sealing disc" in claim 29.

Claim 48 provides for the use of a turnbuckle for use with the pipeline pig of claim 29, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim 48 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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Claims 29, 32, 34-35, 37, 40 and 45-46 are rejected under 35 U.S.C. 102(b) as being anticipated by Loeffler (USP 2,88,7118).

Loeffler teaches a pipe-cleaning device comprising a plurality of wheels and links wherein the links are mounted around a piston, which is mounted in the pump having a shaft. The links are joined to a slidable sleeve and maintain the wheels in their outwardly extended position. See col. 3, lines 64-72, col. 23-31 and col. 5, lines 35-49. As shown in figure 1 and 2 the links are offset from the axis of the pump shaft. Loeffler further teaches the device may comprise a bowl-shaped cleaning head. See col. 2, lines 35-39.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 30-31, 39, 41, 43-44, and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Loeffler '118.

Loeffler discussed above, does not specifically require an offset angle as specified in claims 30-31; however, it would have been obvious to one of ordinary skill in the art the time the invention was made to have adjusted the inclination of the links that maintain the wheels in their extended outwardly position in order to maintain the desired

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load of the wheels against the inside wall of the pipe so that the surface of the wheel may wear evenly.

With respect to claim 39, the reference does not specifically mention that the pig has a differential pressure of 0.5 or less; however, at col. 4, lines 31-62 teaches the pressure differential may be varied due to velocity and due to the directing of fluid force against the pipe.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have varied the velocity and direction of the fluid force in order to achieve the desired pressure differential.

Claim 41: As shown in figure 2, the wheels of one wheel assembly are offset relative to the other.

Claim 43: Loeffler at col. 3, lines 21-39 teaches the pressure between the rear side and forward side of the cleaning head may be varied by compression of the coil springs.

Claim 44: The reference does not specifically mention that the cleaning head is collapsible; however, it is within the judgment of the skilled artisan to select a suitable cleaning head for a pipeline pig depending on the nature of the pipe to be cleaned.

Claim 49: Loeffler does not require coupling the pipeline pig to another pig; however, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have connected the pig of Loeffler to other pig, since it has been held that mere duplication of the essential working parts of a device and connecting the devices together involves only routine skill in the art. Such a modification, coupling two

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pigs to each other, would have been obvious in order to facilitate the cleaning of a long pipe.

Claim Rejections - 35 USC § 103

Claims 36, 38, 42 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Loeffler '118 in view of applicant's prior art admission.

Regarding claims 36, 38, and 47, Loeffler does not specifically mention that the device may be an inspection pig; however, it is known to provide a pipeline pig with monitoring equipment, for example, gauging discs, measuring equipment to enable the detection of structural flaws in the pipes as admitted by the applicant on page 3, lines 1-9.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided the pipeline pig of Loeffler with a monitoring or an inspection device so that the pig may detect structural flaws in the pipes.

Regarding claims 38, it is known to provide a pipeline pig with a sealing disc and a guide disc as admitted by the applicant on page 1, lines 12-17.

Regarding claim 42, the recitation that the pipeline pig is adapted to be a monitoring pig, it has been held that the recitation that an element is "adapted to" perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense.

Claim Rejections - 35 USC § 103

Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Loeffler (USP 2,887,118) in view of Mizuho et al (USP 4,938,167).

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Loeffler discussed above, does require the piston to comprises spring; however, Mizuho '167 teaches a self-propelled vehicle for use in a pipe wherein the vehicle comprises a spring-loaded piston. See col. 5, line 55 through col. 6, line 19.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided the piston of Loeffler with a spring mechanism so that the device may propel.

Claim Rejections - 35 USC § 103

Claim 48 is rejected under 35 U.S.C. 103(a) as being unpatentable over Loeffler (USP 2,887,118) in view of VerNooy (USP 3,755,908).

Loeffler discussed above, does not require a turnbuckle; however, VerNooy teaches a pipeline comprising feeler arms in which the arms are provided with a turnbuckle. See col. 4, line 10.


It would a have been obvious to one of ordinary skill in the art at the time the invention was made to have provided a turnbuckle to the device of Loeffler for coupling and tightening the links so that the links may maintain the wheels in outwardly extended position.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Abraham Bahta whose telephone number is (571) 272-1352. The examiner can normally be reached on Monday - Friday; 11:30 am - 8:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Deborah Jones can be reached on (571) 272-1535. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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03/17/05


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